Mini Flow Meter

For point of use applications

Key Features

- Inline flow meter
- Pipe Sizes:
  - NPT: DN3 to DN10
  - G thread: D10 to DN40
- For clean, dry compressed air and gases
- Accuracy: ±1.5% reading, ±0.3% full scale
- Digital display
- Power Supply: 24 vDC
- Two outputs as standard:
  - Digital - Modbus RTU
  - Analog – 4...20 mA + Pulse
- Measure: instantaneous flow and cumulative flow

About

The mini flow meter is ideal for low gas flow, small pipe applications. The flow meter is based on the principle of thermal diffusion, directly measuring the mass flow without the need for pressure and temperature compensation.

The in-built digital display shows instantaneous flow and cumulative flow. Ultra-wide 1:100 range ratio, measuring limit as low as 0.04 at reference conditions (DN3). Integrated digital adaptive signal processing technology can effectively suppress random errors. The fully isolated electrical structure completely filters out interference.

The integrated temperature measurement sensor is based on the micro-electromechanical system (MEMS) made of CMOS semiconductor technology to achieve high-precision measurements

Applications

- Manufacturing and industrial use
- Clean, dry compressed air and inert gases
- Temporary or permanent installation
- Gas pressure up to 16 bar (232 psi)

More Info

CAA SENSORS

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Specifications

Measurement Range	
Flow Velocity	Refer to chart on next page
Gas Temperature	-20 to +60°C -4 to +140°F
Gas Pressure	0 to 16 bar (232 psi)
Accuracy	
Flow Accuracy	±(1.5% RD + 0.3% FS)
Repeatability	< 0.25% FS
Sensitivity	< 0.1% FS
Zero Drift	< 0.1% FS
Response Time	< 20ms
Reference Conditions: 20 °C, 1 bar(a) -ISO 1217	
The accuracy and response time of the sensor can be affected by the on-site conditions, contaminates in the gas and incorrect installation.	
Working Environment	
Ambient Temperature	-30 to +70°C -22 to +158°F
Gas types	Compressed air, nitrogen, oxygen, carbon dioxide and other non-condensable gases
Gas Quality	Clean and dry gas

Output	
Analogue Output	4-20 mA
Digital Output	Modbus RTU (RS485)
Output Signals	Instantaneous flow and Cumulative flow
Full digital signal processing	
Power Supply	
Power Requirement	24v DC
Power Consumption	<48mV
Other	
Process Connection	Female NPT (DN3 to DN10) Female G thread (DN10 to DN40)
Pipe Size	DN3 to DN40 1/8” to 1.5”
IP Rating	IP54
Sensor Technology	Thermal diffusion
Materials	Flow channel and connectors: SUS304 Seal: FKM, EPDM
Turndown Ratio	Ultra-wide, 1:100
Installation	Permanent or Temporary
Calibration	Every 2 years
Annual calibration is required if the sensor is exposed to relative humidity above 85%.	
Warranty	12 months
HS Code	9026.80.80

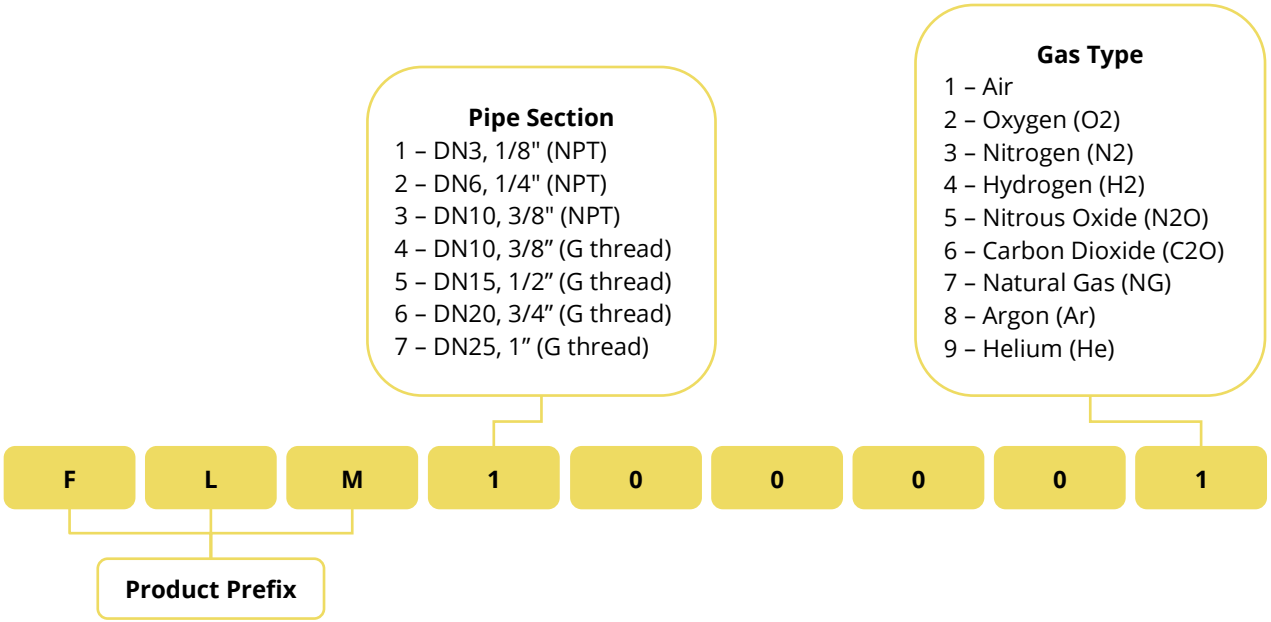
Flow Range

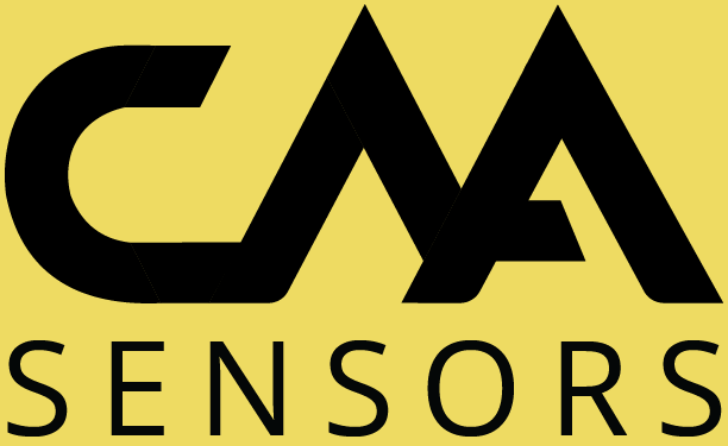
DN	Connection	Length (mm)	Width (mm)	Height (mm)	Flow Range (SLM)
3	Female NPT 1/8”	88	38	56	0.02 ... 2
6	Female NPT 1/4”	88	38	56	0.5 ... 50
10	Female NPT 3/8”	88	38	56	1 ... 100
10	Female G 3/8”	88	38	56	1 ... 100
15	Female G 1/2”	88	38	72	3 ... 300
20	Female G 3/4”	88	38	72	8 ... 800
25	Female G 1”	133	49	78	15 ... 1500
32	Female G 1.25”	133	54	85	20 ... 2000
40	Female G 1.5”	133	58	90	30 ... 3000

SLM = standard liters per minute, at reference conditions (20 °C, 1 bar(a) -ISO 1217)

How to Order

Find a Distributor: www.caasensors/distributors





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